

# **IMS RbRs and their L4 kids in RTM BASELINE012696**

CCR 96-0117A to change RTM in accordance with responses to NASA DID 304 rejection comments  
file - attach1.doc

The following are changes made to this CCR since the original submission:

- 1) removed addition of new S-CLS-10835 The WKBCH CI shall provide users a capability to access a utility for the transmission of documents to the DDSRV.
- 2) Changed word "guide" to "DDSRV" in S-CLS-12908
- 3) link S-CLS-12908 to IMS-0490#B

Table 1 - Reference table for CLS L4s and their RbR parents

<b>L3 RbR ID</b>	<b>RT M key</b>	<b>L3 RbR Text</b>	<b>RbR Type</b>	Interpretation	<b>L4 ID</b>	<b>Rel</b>	<b>RT M key</b>	<b>L4 Rqmt Text</b>	Clarification
IMS-0340#B	5070	The metadata maintained by the IMS shall contain content-based summary information, including statistical summaries and granule features, for all ECS standard and special products.	functional		<u>S-CLS-10240</u>	B	8125	The WKBCH CI shall provide the capability for users to request subsetted, subsampled, and summary products.	
IMS-0340#B					<u>S-CLS-10010</u>	B	8109	The WKBCH CI shall provide the capability for users to compose Search Requests based on product specific and core metadata attributes.	
IMS-0340#B					<u>S-CLS-10220</u>	B	8123	The WKBCH CI shall allow users to formulate a Data Request based on the results of searching the inventory core metadata attributes and inventory product specific metadata attributes.	
IMS-0720#B	5206	The IMS shall provide the capability to request data products which are processed ad hoc in response to user requests for subsetting, subsampling, or averaging within a granule based on defined criteria to include: a. Geographical location (x, y, z - spatial with rectangular boundaries) b. Spectral band c. Time d. WRS	functional		<u>S-CLS-10340</u>	A	2676	The WKBCH CI shall provide users the capability of displaying 24-bit raster images.	
IMS-0720#B					<u>S-CLS-10290</u>	A	2556	The WKBCH CI shall provide users the capability to browse data in ECS supported visualization formats in a window during the data selection and acquisition process,	
IMS-0720#B					<u>S-CLS-10330</u>	A	2675	The WKBCH CI shall provide users the capability of displaying 8-bit raster images.	

IMS-0160#B	4993	The IMS shall provide levels of user interaction support to include at a minimum: a. Expert (e.g., quick command driven direct information input) b. Intermediate (e.g., some prompting and automatically supplied help) c. Novice (e.g., extensive prompting and help facilities)	functional		<u>S-CLS-12960</u>	<u>C-B</u>	2655	The WKBCH CI shall provide a Novice level of user interaction.	
IMS-0160#B					<u>S-CLS-12920</u>	<u>C-B</u>	2651	The WKBCH CI shall provide an option for Expert level of user interaction.	
IMS-0160#B					<u>S-CLS-12930</u>	<u>C-B</u>	2652	The Expert level of interaction shall provide direct information input with no automatically supplied help.	
IMS-0160#B					<u>S-CLS-12940</u>	<u>C-B</u>	2653	The WKBCH CI shall provide an option for Intermediate level of user interaction.	
IMS-0160#B					<u>S-CLS-12950</u>	<u>C-B</u>	2654	The Intermediate level of interaction shall provide prompting and automatically supplied help.	
IMS-0415#A	5499	The IMS shall provide the ability to access and present (dependent on the user's display device capabilities) guide information which includes graphics and hypertext, derivable from suitably structured documents, as well as plain text documents.	functional	A: GUI	<u>S-CLS-10740</u>	A	2560	The WKBCH CI shall provide access to guide information in ECS supported document formats.	
IMS-0415#B	5090	The IMS shall provide the ability to access and present (dependent on the user's display device capabilities) guide information which includes graphics and hypertext, derivable from suitably structured documents, as well as plain text documents.	functional		<u>S-CLS-10740</u>	A	2560	The WKBCH CI shall provide access to guide information in ECS supported document formats.	
IMS-0480#B	5120	The IMS shall allow the user to store documents in the ECS.	functional		<u>S-CLS-12908</u>	<u>B</u>	xxxx	<u>The WKBCH CI shall provide users a capability to submit documents to the guide.</u>	

IMS-0490#B	5124	The IMS shall provide the capability to ingest documentation in a number of digital text formats, at a minimum the following: a. ASCII text b. Microsoft WORD c. HTML d. Interleaf e. Postscript f. WordPerfect	standards		<u>S-CLS-12908</u>	<u>B</u>	xxxx	<u>The WKBCH CI shall provide users a capability to submit documents to the guide.</u>	
IMS-0510#A	5509	The IMS shall provide tools for research planning and data search, to include at a minimum: a. Data acquisition schedules and plans b. The capability to map specified geophysical parameters to the appropriate instrument and/or Standard Product c. Descriptive information on instruments and geophysical parameters available in Standard Products d. Climatology information f. Geographic reference aids g. Spacecraft location projections.	interface		<u>S-CLS-10840</u>	A	2593	The WKBCH CI shall provide the ability for terminals with HTML viewers to access guide information in HTML format which includes graphics and hypertext.	
IMS-0510#A					<u>S-CLS-10300</u>	A <u>B</u>	9167	The WKBCH CI shall provide visual overlays to aid in the selection of spatial data and to enhance the display of geographic metadata.	
IMS-0510#B	5130	The IMS shall provide tools for research planning and data search, to include at a minimum: a. Data acquisition schedules and plans b. The capability to map specified geophysical parameters to the appropriate instrument and/or Standard Product c. Descriptive information on instruments and geophysical parameters available in Standard Products d. Climatology information f. Geographic reference aids g. Spacecraft location projections.	interface		<u>S-CLS-10840</u>	A	2593	The WKBCH CI shall provide the ability for terminals with HTML viewers to access guide information in HTML format which includes graphics and hypertext.	

IMS-0510#B					<u>S-CLS-10882</u>	<u>B</u>	<u>xxxx</u>	The WKBCH CI shall provide users the capability to display climatology information.	
IMS-0510#B					<u>S-CLS-10884</u>	<u>B</u>	<u>xxxx</u>	The WKBCH CI shall provide users the capability to display geographic reference aids.	
IMS-0510#B					<u>S-CLS-13860</u>	<u>B</u>	8270	The WKBCH CI shall provide EOS-AM spacecraft location projections as an reference aid to the creation of ASTER Data Acquisition Requests	
IMS-0510#B					<u>S-CLS-10300</u>	<u>A B</u>	9167	The WKBCH CI shall provide visual overlays to aid in the selection of spatial data and to enhance the display of geographic metadata.	
IMS-0510#B					<u>S-CLS-13700</u>	<u>B</u>	8256	Overlays provided for display to users shall be continuous over the entire display area, regardless of any gaps in the science data, for data following HDF-EOS geolocation conventions.	
IMS-0510#B					<u>S-CLS-13710</u>	<u>A</u>	2581	The WKBCH CI shall provide users the capability to display on a coverage map the geographic coverage of Data Granules.	
IMS-0510#B					<u>S-CLS-10740</u>	<u>A</u>	2560	The WKBCH CI shall provide access to guide information in ECS supported document formats.	
IMS-0510#B					<u>S-CLS-10830</u>	<u>A</u>	2596	The WKBCH CI shall provide the capability to access and present guide information as ASCII text documents.	
IMS-0630#B	5184	The IMS shall provide the capability to select metadata for retrieval by: a. Boolean operators b. Relational operators c. Attribute values d. Search strings e. Combinations thereof	functional		<u>S-CLS-10175</u>	<u>B</u>	<u>xxxx</u>	The WKBCH CI shall support SQL syntax for queries on Advertising.	
IMS-0650#B	5188	The IMS shall query non-geographic metadata by any of the following criteria at a minimum: a. Exact word match b. Phrase match c. Character set (string) d. Wildcard construct (prefix, embedded, suffix) e. Character range f. Logical and Boolean operators g. Min/max range search h. Any combination of the above	functional		<u>S-CLS-10130</u>	<u>B</u>	8114	The WKBCH CI shall provide users the capability to use boolean operators to relate query parameters for geographic and non-geographic Metadata.	

IMS-0650#B					<u>S-CLS-10175</u>	<u>B</u>	xxxx	The WKBCH CI shall support SQL syntax for queries on Advertising.	
IMS-0650#B					<u>S-CLS-10780</u>	A	2785	The WKBCH CI shall list Dependent Valid Values to assist users in formulating Search Requests.	
IMS-0540#B	5138	The IMS shall display PGS system processing schedules to users.	functional		<u>S-CLS-10620</u>	A	9132	The WKBCH CI shall provide users the capability to view documentation ingested in any of the following document formats: a) PostScript, b) ASCII, c) Hypertext Markup Language (HTML), d) Microsoft Word, e) WordPerfect, f) Adobe Acrobat Portable Document Format (PDF).	
IMS-0580#B	5173	The IMS shall provide geographic and geophysical (e.g. ocean bathymetry surface features) overlays to aid in the selection of spatial data and to enhance the display of metadata.	functional		<u>S-CLS-10090</u>	B	8113	The WKBCH CI shall support query of geographic Metadata by geographic name by text input.	
IMS-0580#B					<u>S-CLS-10310</u>	B	8129	The WKBCH CI shall provide users the capability of positioning the cursor by entering an image X,Y coordinate.	
IMS-0580#B					<u>S-CLS-10060</u>	A	2542	The WKBCH CI shall support a minimum bounding rectangle criteria for query of geographic Metadata by text and graphical input.	
IMS-0580#B					<u>S-CLS-10070</u>	B	8110	The WKBCH CI shall support point-and-radius criteria for query of geographic Metadata by text and graphical input.	
IMS-0580#B					<u>S-CLS-10080</u>	B	8112	The WKBCH CI shall support polygonal coordinate criteria for query of geographic Metadata by graphical input.	

IMS-0640#B	5186	The IMS shall provide the capability to query geographic metadata by any of the following criteria at a minimum: a. Geographic reference b. Data element content (as specified in metadata) c. Minimum bounding rectangle d. Point and radius e. Polygon f. Geographic name (based on a standard data base, such as USGS Geographic Names Information System) g. WRS h. Any combination of the above	functional	There was a mistake made in the F&PRS. GSFC has been notified. It appears as though item f. replaced the original item f. This is not the case item f. WRS is and additional item and becomes item g.	<u>S-CLS-13570</u>	A	2578	The user shall be able to indicate a spatial search criterion by drawing a polygon on a displayed map overlay.	
IMS-0640#B					<u>S-CLS-10075</u>	B	8111	The WKBCH CI shall support point criteria for query of geographic Metadata by text and graphical input.	
IMS-0670#B	5198	The IMS shall provide the capability to accept, validate, and fill orders from users for periodic delivery of information stored at the IMS.	functional		<u>S-CLS-12780</u>	<u>C-B</u>	2536	The WKBCH CI shall provide the default instructions defined by the user in response to an event if the the user has requested that the event Notification be suppressed.	
IMS-0670#B					<u>S-CLS-12750</u>	<u>C-B</u>	2533	The WKBCH CI shall provide users the capability to define default instructions for such events, by type of event and session..	
IMS-0670#B					<u>S-CLS-12770</u>	<u>C-B</u>	2535	The WKBCH CI shall provide users the capability to modify and remove default instructions and rescind the directive to suppress event Notification, by type of event and session..	

Table 2 - Changes to existing LEVEL\_4

L4 ID	Rel	RT M key	L4 Rqmt Text	Clarification
S-CLS-10620	A	9132	The WKBCH CI shall provide users the capability to view documentation ingested in any of the following document formats: a) PostScript, b) ASCII, c) Hypertext Markup Language (HTML), d) Microsoft Word, e) WordPerfect, f) Adobe Acrobat Portable Document Format (PDF), <u>g) Interleaf.</u>	
S-CLS-13990	B	8281	The WKBCH CI shall provide users the capability to view resulting coverage <u>selection area</u> on a map when a lat/lon selection is typed in for a search.	
S-CLS-10120	A	2548	The WKBCH CI shall support substring <u>character set (string)</u> matching criteria for query of non-geographic Metadata.	
S-CLS-11040	B	8164	The WKBCH CI shall provide users the capability to obtain Search Request <u>data processing</u> Status during the processing of a Search request initiated by the user.	
S-CLS-11080	B	8167	The WKBCH CI shall provide the capability for users to obtain <u>request and receive</u> their current account balance.	
S-CLS-14210	A	2759	The WKBCH CI shall forward User <u>feedback and</u> Comments to the SMC.	
S-CLS-14210	A	2759	The WKBCH CI shall forward User Comments to SMC <u>the</u> user's home DAAC.	
S-CLS-11100	B	8169	The WKBCH CI shall accept from the users user feedback information, on product data quality assessment and output it to the SMC <u>DAAC originating the data.</u>	
S-CLS-13390	B	8232	The WKBCH CI shall allow or deny the user system access based on User Validation Status returned from CSMS <u>the</u> SMC.	
S-CLS-10100	A	2546	The WKBCH CI shall support phrase matching criteria for query of <u>alpha-numeric</u> non-geographic Metadata.	
S-CLS-10110	A	2547	The WKBCH CI shall support an exact word matching criteria for query of <u>alpha-numeric</u> non-geographic Metadata.	
S-CLS-10120	A	2548	The WKBCH CI shall support substring matching criteria for query of <u>alpha-numeric</u> non-geographic Metadata.	
S-CLS-10140	B	8115	The WKBCH CI shall support wildcard construct (prefix, embedded, suffix) matching criteria for query of <u>alpha-numeric</u> non-geographic Metadata.	
S-CLS-10150	B	8116	The WKBCH CI shall support character range matching criteria for query of <u>alpha-numeric</u> non-geographic Metadata.	
S-CLS-10160	B	8117	The WKBCH CI shall support logical and boolean operators matching criteria for query of <u>alpha-numeric</u> non-geographic Metadata.	
S-CLS-10300	A <u>B</u>	9167	The WKBCH CI shall provide visual overlays to aid in the selection of spatial data and to enhance the display of geographic metadata.	

S-CLS-13860	B	8270	The WKBCH CI shall provide EOS-AM spacecraft location projections as an reference aid to the creation of ASTER Data Acquisition Requests	
S-CLS-10060	A	2542	The WKBCH CI shall support a minimum bounding rectangle criteria for query of geographic Metadata by text <u>and graphical</u> input.	
S-CLS-10960	A	2609	The WKBCH CI shall provide the capability for users to generate Distribution Requests <u>orders</u> for the one-time distribution of ECS data <u>to be distributed on a one-time basis.</u>	
S-CLS-12960	<u>C B</u>	2655	The WKBCH CI shall provide a Novice level of user interaction.	
S-CLS-12920	<u>C B</u>	2651	The WKBCH CI shall provide an option for Expert level of user interaction.	
S-CLS-12930	<u>C B</u>	2652	The Expert level of interaction shall provide direct information input with no automatically supplied help.	
S-CLS-12940	<u>C B</u>	2653	The WKBCH CI shall provide an option for Intermediate level of user interaction.	
S-CLS-12950	<u>C B</u>	2654	The Intermediate level of interaction shall provide prompting and automatically supplied help.	
S-CLS-12780	<u>C B</u>	2536	The WKBCH CI shall provide the default instructions defined by the user in response to an event if the the user has requested that the event Notification be suppressed.	
S-CLS-12750	<u>C B</u>	2533	The WKBCH CI shall provide users the capability to define default instructions for such events, by type of event and session..	
S-CLS-12770	<u>C B</u>	2535	The WKBCH CI shall provide users the capability to modify and remove default instructions and rescind the directive to suppress event Notification, by type of event and session..	



Table 3 - New LEVEL 4 requirements

<b>L4 ID</b>	<b>Rel</b>	<b>RT M key</b>	<b>L4 Rqmt Text</b>	<b>Clarification</b>
<u>S-CLS-12908</u>	<u>B</u>	<u>xxxx</u>	<u>The WK BCH CI shall provide users a capability to submit documents to the guide.</u>	
<u>S-CLS-10882</u>	<u>B</u>	<u>xxxx</u>	<u>The WK BCH CI shall provide users the capability to display climatology information.</u>	
<u>S-CLS-10884</u>	<u>B</u>	<u>xxxx</u>	<u>The WK BCH CI shall provide users the capability to display geographic reference aids.</u>	
<u>S-CLS-10175</u>	<u>B</u>	<u>xxxx</u>	<u>The WK BCH CI shall support SQL syntax for queries on Advertising.</u>	

Table 4 - LEVEL 4 requirements to be deleted

<b>L4 ID</b>	<b>Rel</b>	<b>RT M key</b>	<b>L4 Rqmt Text</b>	<b>Clarification</b>
<u>S-CLS-10740</u>	<u>A</u>	<u>2560</u>	<u>The WK BCH CI shall provide access to guide information in ECS supported document formats.</u>	

Table 5 - Links to be added between LEVEL\_4 and REQ\_BY\_REL

<b>L3 RbR ID</b>	<b>L4 ID</b>
IMS-0340#B	S-CLS-10240
IMS-0340#B	S-CLS-10010
IMS-0340#B	S-CLS-10220
IMS-0720#B	S-CLS-10340
IMS-0720#B	S-CLS-10290
IMS-0720#B	S-CLS-10330
IMS-0160#B	S-CLS-12960
IMS-0160#B	S-CLS-12920
IMS-0160#B	S-CLS-12930
IMS-0160#B	S-CLS-12940
IMS-0160#B	S-CLS-12950
IMS-0480#B	S-CLS-12908
IMS-0490#B	S-CLS-12908
IMS-0510#A	S-CLS-10840
IMS-0510#B	S-CLS-10840
IMS-0510#B	S-CLS-10882
IMS-0510#B	S-CLS-10884
IMS-0510#B	S-CLS-13860
IMS-0510#B	S-CLS-10300
IMS-0510#B	S-CLS-13700
IMS-0510#B	S-CLS-13710
IMS-0510#B	S-CLS-10740
IMS-0510#B	S-CLS-10830
IMS-0630#B	S-CLS-10175
IMS-0650#B	S-CLS-10130
IMS-0650#B	S-CLS-10175
IMS-0650#B	S-CLS-10780
IMS-0540#B	S-CLS-10620
IMS-0580#B	S-CLS-10090
IMS-0580#B	S-CLS-10310
IMS-0580#B	S-CLS-10060
IMS-0580#B	S-CLS-10070
IMS-0580#B	S-CLS-10080
IMS-0640#B	S-CLS-13570
IMS-0640#B	S-CLS-10075
IMS-0670#B	S-CLS-12780
IMS-0670#B	S-CLS-12750
IMS-0670#B	S-CLS-12770

Table 6 - Links to be deleted between LEVEL\_4 and REQ\_BY\_REL

<b>L3 RbR ID</b>	<b>L4 ID</b>
IMS-0415#A	S-CLS-10740

IMS-0415#B	S-CLS-10740
IMS-0510#A	S-CLS-10300